

INTERNATIONAL SEARCH REPORT

PCT/US2004/040438

A. CLASSIFICATION OF SUBJECT MATTER C12N9/16 C12N9/50 C12N9/52		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) C12N		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO- Internal , Sequence Search		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
A	EP 0 359 087 A (THE CLOROX COMPANY) 21 March 1990 (1990-03-21) the whole document ----- EP 0 268 456 A (THE CLOROX COMPANY) 25 May 1988 (1988-05-25) the whole document ----- US 5 352 594 A (POULOUSE ET AL) 4 October 1994 (1994-10-04) the whole document ----- EP 0 375 102 A (THE CLOROX COMPANY) 27 June 1990 (1990-06-27) the whole document ----- - / -	
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C		<input checked="" type="checkbox"/> Patent family members are listed in annex
<p>° Special categories of cited documents</p> <p>'A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>'E" earlier document but published on or after the international filing date</p> <p>'U" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>		
Date of the actual completion of the international search	Date of mailing of the international search report	
3 June 2005	29. 11. 2005	
Name and mailing address of the ISA European Patent Office, P B 5818 Patentlaan 2 NL 2280 HV Rijswijk Tel (+31-70) 340-2040 Tx 31 651 epo nl Fax (+31 70) 340-3016	Authorized officer Smal t, R	

INTERNATIONAL SEARCH REPORT

PCT/US2004/010438

C(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
A	<p>DATABASE UniProt [Online] 1 December 2001 (2001-12-01) , "Predicted protein." XP002330234 retrieved from EBI accession no. UNI PROT: Q92XZ6 Database accession no. Q92XZ6 the whole document</p> <p>-----</p> <p>DATABASE UniProt [Online] 1 October 2001 (2001-10-01) , "Aryl esterase." XP002330235 retrieved from EBI accession no. UNI PROT: Q98MY5 Database accession no. Q98MY5 the whole document</p> <p>-----</p> <p>DATABASE UniProt [Online] 1 June 2003 (2003-06-01) , "Lipase, GDSL family." XP002330247 retrieved from EBI accession no. UNI PROT: Q88KH2 Database accession no. Q88KH2 the whole document</p> <p>-----</p> <p>WO 2004/058961 A (HENKEL KOMMANDITGESELLSCHAFT AUF AKTIEN; WIELAND, SUSANNE; POLANYI-BAL) 15 July 2004 (2004-07-15)</p> <p>the whole document</p> <p>-----</p>	
P.X		1, 7, 118, 121-125, 134, 135, 153, 157, 163

INTERNATIONAL SEARCH REPORT

PCT/US2004/040438

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons

1 Claims Nos because they relate to subject matter not required to be searched by this Authority namely

2 Claims Nos because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically

3 Claims Nos because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 64(a)

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows

see additional sheet

1 As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims

2 As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee

3 As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only the inventions for which fees were paid. Specifically claims Nos

4 NO required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims it is covered by claims Nos

4,119, 20 (completely) ; 1-3,5-7,68,70-84,86,87,118,121-125,127-135,153-158
163-166 (partially)

Remark on Protest

The additional search fees were accompanied by the applicant's protest

* No protest accompanied the payment of additional search fees

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: claim 4, 119 and 120 completely, and claim 1-3, 5-7, 68, 70-84, 86, 87, 118, 121-125, 127-135, 153-158, and 163-166 partly

A perhydrolase protein comprising the sequence represented in SEQ. ID. 2, nucleic acids encoding it, and composition comprising it.

Inventions 2-188: claims 13, 5-87, 104-118, and 121-166, all partly and as far as applicable

Subject-matter essentially as defined for invention 1, but limited to mutants of SEQ. ID. 2 at respectively positions 1-8, 10-80, 82-87, 89, 90, 92, 123-130, 132, 133, 135, 136, 138, 140-143, 145-151, 153, 154, 157, 159, 161, 162, 164-168, 170-172, 175, 176, 178, 182-186, 188, 190-194, 196-199, 201-203, 205, 206 and 208-216.

Invention 189: claims 88-103 completely

Method for identifying a perhydrolase, proteins identified thereby, and nucleic acids encoding them.

INTERNATIONAL SEARCH REPORT

PCT/US2004/040438

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 0359087	A	21-03-1990	AU	2218492 A		07-01-1993
			AU	3672989 A		15-03-1990
			JP	2113097 A		25-04-1990
			JP	2729676 B2		18-03-1998
<hr/>						
EP 0268456	A	25-05-1988	AR	245953 A1		30-03-1994
			AU	599436 B2		19-07-1990
			AU	8134087 A		26-05-1988
			DE	3776089 D1		27-02-1992
			ES	2030075 T3		16-10-1992
			GR	3004391 T3		31-03-1993
			JP	3077700 B2		14-08-2000
			JP	63148988 A		21-06-1988
			MX	166926 B		15-02-1993
			TR	23330 A		08-11-1989
<hr/>						
US 5352594	A	04-10-1994		NONE		
<hr/>						
EP 0375102	A	27-06-1990	AT	136927 T		15-05-1996
			DE	68926286 D1		23-05-1996
			DE	68926286 T2		09-01-1997
			ES	2087864 T3		01-08-1996
			JP	2225599 A		07-09-1990
			JP	2772564 B2		02-07-1998
<hr/>						
WO 2004058961	A	15-07-2004	AU	2003294841 A1		22-07-2004
			DE	10260903 A1		08-07-2004
			EP	1572997 A1		14-09-2005
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